

Amendments to the Claims:

Please cancel claims 1-15 and 18-22; and amend claim 16.

1. (Original) A switch matrix comprising:

an electrically grounded housing having:

a first housing section having an input port for receiving a first feed line, said first housing section containing a first switch head of each of a plurality of switch assemblies;

a second housing section having an input port for receiving a second feed line, said second housing section containing a second switch head of each of a plurality of switch assemblies;

wherein only one of said plurality of switch assemblies of said first and second housing sections is common;

a hollow thimble section joining said first and second housing sections and encasing a section of said common switch assembly;

said common switch assembly comprising:

a connecting conductor for providing a transmission path between said first and second switch heads of said common switch assembly;

a first switching assembly insulator having a bearing assembly for receiving a first distal end of said connecting conductor;

a second switching assembly insulator having a bearing assembly for receiving a second distal end of said connecting conductor; and

said first and second switching assembly insulators providing isolation of the connecting conductor from said housing.

2. (Original) The switch matrix of claim 1, wherein said bearings of said switching assembly insulators are rotary bearings.

3. (Original) The switch matrix of claim 1, further comprising:

a plurality of indicators mounted on the outside of said housing to indicate the orientation of the switch assembly, each of said indicators mechanically joined to a separate one of said switch heads contained in said second housing section.

4. (Original) The switch matrix of claim 1, further comprising:

a first switch blade contact connected to one end of a conductor line of said switch head, a second end of said conductor line of said switch head connected to the connecting conductor; and

a second and third switch blade contact of said switch head connected to a high conductivity plate, said second and third switch blade contacts and said high conductivity plate being electrically isolated from said conductor line of said switch head.

5. (Original) The switch matrix of claim 4, further comprising:

a separate switch head insulator plate provided between each of said first plurality of switch heads in said first housing section; and

each of said switch head insulator plates containing a first set of finger contacts for engaging said switch blade contacts of a first of adjacent switch heads and a second set of finger contacts for engaging said switch blade contacts of a second of adjacent switch heads, said switch head insulator plates providing isolation of said finger contacts from said housing.

6. (Original) The switch matrix of claim 5, further comprising:

a corona shield provided around said first set of finger contacts of each switch head insulator plate; and

a corona shield provided around said second set of finger contacts of each switch head insulator plate.

7. (Original) The switch matrix of claim 5, further comprising:

a grounding clip connected to said first housing for engaging said switch blade contacts of said switch head to provide a ground path for said conductor line of said switch head or said high conductivity plate of said switch head.

8. (Original) The switch matrix of claim 7, further comprising a motor for rotating said common switch assembly.

9. (Original) The switch matrix of claim 8 further comprising a drive shaft connected at one distal end to an insulating end plate of the first switch head of said common switch assembly and at the other distal end to the motor.

10. (Original) The switch matrix of claim 1, wherein said first switching assembly insulator is connected between said thimble section and said first housing section and said second insulator is connected between said thimble section and said second housing section.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) An insulator plate for a switch matrix, comprising:

a circular plate having four equally spaced tabs projecting outward from the rim of the plate and a plurality of ports provided there through;

having a first and a second set of finger contacts mounted on opposing sides and electrically connected through said plate;

a corona shield provided around said first and second set of finger contacts;

a rotary bearing disposed within said plate; and

wherein said plate is composed of an insulating material.

17. (Original) The insulator plate of claim 16, wherein said plate is composed of Teflon.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)